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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/388,891	09/02/1999	CLAUS SKAANNING	10991814-1	4611

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EXAMINER

EVANS, ARTHUR G

ART UNIT	PAPER NUMBER
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2622

DATE MAILED: 06/03/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/388,891

Applicant(s)

SKAANNING, CLAUS

Examiner

Arthur G. Evans

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 20-25 is/are allowed.
- 6) ☒ Claim(s) 1-8, 15-19 and 26-33 is/are rejected.
- 7) ☐ Claim(s) 9-14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 15-18 and 26-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsuyama et al.

Note “a cause editor interface that allows an author to place, in a cause data structure, information pertaining to cause of malfunction of the product” (terminal apparatus capable of inputting new fault information by maintenance engineer, see lines 60-63 of column 2 and lines 17-21 of column 3), “an action editor interface that allows an author to place, in an action data structure, information pertaining to actions that can be taken to correct malfunction of the product” (an unit for generating information concerning adjustment or repair of the product suffering from the fault, see lines 1-2 of column 3) and “a question editor interface that allows an author to place, in a question data structure, information pertaining to questions that can be asked a user of the product to help identify cause of malfunction of the product” (an unit for generating information concerning structure and the characteristics of the product, see lines 1-6 of column 3) as claimed in claim 1 of the application and taught by Tsuyama et al.

Note “a library of modules, at least one of the modules contain troubleshooting information about a component of the product” (a plurality of modules, i.e. library

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includes fault analysis/predicting module, see lines 6-34 of column 13) as claimed in claim 2 of the application and taught by Tsuyama et al.

Note “author can save the library of modules to a disk storage device, load the library of modules from the disk storage device, load the library of modules from the disk storage device and create a new library of modules” (fault information is edited on a computer, which would inherently permit loading, saving and creating module file) as claimed in claim 3 of the application.

Note “author can select modules from the library of modules when building the automated troubleshooter for the product” (a plurality of modules, i.e. library includes fault analysis/predicting module, see lines 6-34 of column 13) as claimed in claim 4 of the application and taught by Tsuyama et al.

Note “author can create new modules and delete modules” (fault information is edited on a computer, which would inherently permit creating and deleting of module files) as claimed in claim 5 of the application.

Note, “author can rename modules and import modules from other libraries of modules” (fault information is edited on a computer, which would inherently permit renaming and import modules files) as, claimed in claim 6 of the application.

Note “name of the cause” (ID of individual fault node, see lines 21-41 of column 9), “parent of the cause” (parent of individual node, see line 24 of column 9), “explanation of the cause” (for symptom or test procedure, see lines 25-27 of column 9) and “probability of the cause being source of malfunction” (see lines 31-36 of column 9) as claimed in claim 7 of the application and taught by Tsuyama et al.

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Note cause editor, action editor and question editor “create” “entries” (information is edited on a computer, which would inherently permit creating module files) as claimed in claim 15 of the application.

Note cause editor, action editor and question editor “edit existing” “entries” (information is edited on a computer, which would inherently permit edit existing module files) as claimed in claim 16 of the application.

Note cause editor, action editor and question editor “delete” “entries” (information is edited on a computer, which would inherently permit deleting module files) as claimed in claim 17 of the application.

Note “cause editor interface that allows an author to place, in a cause data structure, information pertaining to causes of malfunction of the product” (terminal apparatus capable of inputting new fault information by maintenance engineer, see lines 60-63 of column 2 and lines 17-21 of column 3), “name of the cause” (ID of individual fault node, see lines 21-41 of column 9), “parent of the cause” (parent of individual node, see line 24 of column 9), “explanation of the cause” (for symptom or test procedure, see lines 25-27 of column 9) and “probability of the cause being source of malfunction” (see lines 31-36 of column 9) as claimed in claim 18 of the application and taught by Tsuyama et al.

Note “troubleshooter model editor interface that allows the author to place in a troubleshooter model structure, information pertaining to malfunction of the product” (fault tree is edited by terminal apparatus capable of inputting new fault information by maintenance engineer, see lines 54-63 of column 2) and “library module editor interface

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that allows the author to place in a library data structure information pertaining to modules corresponding with components of the product" (a plurality of modules, i.e. library includes fault analysis/predicting module are edited, see lines 6-34 of column 13) as claimed in claim 26 of the application and taught by Tsuyama et al.

Note "name of a component of a module" (ID of individual fault node, see lines 21-41 of column 9), "causes of the component malfunctioning" (symptom, see lines 25-27 of column 9), "action that can resolve malfunctioning of the component" (information concerning adjustment or repair of the product suffering from the fault, see lines 1-2 of column 3) and "questions that can provide information about the causes of the component malfunctioning" (information concerning structure and the characteristics of the product, see lines 1-6 of column 3) as claimed in claim 27 of the application and taught by Tsuyama et al.

Note "name of a component of a module" (ID of individual fault node, see lines 21-41 of column 9), "causes of the component malfunctioning" (symptom, see lines 25-27 of column 9), "action that can resolve malfunctioning of the component" (information concerning adjustment or repair of the product suffering from the fault, see lines 1-2 of column 3) and "questions that can provide information about the causes of the component malfunctioning" (information concerning structure and the characteristics of the product, see lines 1-6 of column 3) as claimed in claim 28 of the application and taught by Tsuyama et al.

Claims 29-33 are claiming authoring tool as disclosed by Tsuyama et al with inherent computer editing features.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuyama et al in view of Skeirik. Tsuyama teaches the invention substantially as claimed. However, Tsuyama does not teach "dependency on environment" and "indication that a customer is not to access information pertaining to the cause". Skeirik teaches permitting a user in one environment access to edit rulebase (i.e. cause) while not giving access to other users (see lines 37-54 of column 42). Tsuyama and Skeirik are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use teachings of Skeirik in the system of Tsuyama in order to prevent the cause rulebase from being changed by person that was not qualified and prevent new problems from being introduced.

Claims 9-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 20-25 are allowable over the prior art of record.


The examiner as corrected a typo that appeared on the second to the last line of page 78. "21" should have be 22.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arthur G. Evans whose telephone number is 703-305-9653.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on 703-305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 30, 2004


ARTHUR G. EVANS
SENIOR PRIMARY EXAMINER